

Do Misperceptions Predict Behavior?

There are at over twenty published studies in which misperceptions are positively correlated with drinking behavior or predict how individuals drink (Beck & Trieman, 1996; Botvin, et al, 2001; Clapp & McDonnell, 2000; D'Amico et al, 2001; Korcuska & Thombs, 2003; Kypri & Langley, 2003; Lewis & Neighbors, forthcoming; Marks et al, 1992; Mattern & Neighbors, 2004; Page et al, 1999; Perkins, 1985, 1987; Perkins & Wechsler, 1996; Prentice & Miller, 1993; Scher et al, 2001; Steffian, 1999; Thombs, 1999; Thombs et al, 1997; Trockel et al, 2003).

In one literature review, the authors concluded that “perceived normative support of others for drinking consistently predicts personal alcohol use... and to a lesser extent, alcohol-related problems” (Borsari & Carey, 2001). In a number of studies, perceptions of drinking norms were positively associated with drinking behavior. For example,

- Perkins and Wechsler (1996), in a multi-campus study, found that perceptions of campus drinking climate explained more of the variance in drinking behavior than any other variable;
- Clapp and McDonnell (2000) found that perceptions of campus norms predicted drinking behavior and indirectly influenced drinking-related problems;
- In two different studies conducted on the same campus, Perkins (1985, 1987) found that misperceptions predicted alcohol use (Perkins, 1985) and problem use (Perkins, 1987) for students from different religious backgrounds;
- Thombs, Wolcott and Farkash (1997) and Beck and Trieman (1996) found that the best predictors of alcohol use were misperceptions of alcohol use and social climate/context, which both predicted heavy drinking and negative consequences;
- Korcuska and Thombs (2003) found that alcohol use intensity and drinking consequences were positively correlated with perceived norms for both “close friends” and “typical students”; and
- Page, Scanlan and Gilbert (1999) found that overestimations of high-risk drinking were directly correlated with rates of high-risk drinking. Thus, higher rates of high-risk drinking were found among college men who had greater overestimations of its prevalence.

In longitudinal studies examining drinking behavior, perceptions of drinking norms at time one predicted drinking behavior at time two. For example:

- In a longitudinal study of fraternity drinking patterns, Sher et al (2001) found that “perceptions of heavy drinking in the Greek system are largely responsible for the prevalence of heavy drinking among fraternity and sorority members.” (p. 50).
- Prentice and Miller (1993) conducted a study of college freshmen and found that men adjusted their drinking over time to fit the misperceived norm, and
- Steffian (1999), in a test of a small group norms intervention, found that misperceptions helped to discriminate between college students who decreased their drinking and those who didn't.

Similarly, in studies of high school and middle school populations, perceptions of norms have accurately predicted behavior change at a later point in time. Thus,

- In a longitudinal study of over 1500 high school students, only perceived intensity of student alcohol use predicted behavior change so that “higher peer perceptions of alcohol use were associated with subsequent escalations of personal drinking” (D'Amico et al, 2001);
- Two years after a multi-component controlled middle school-based intervention to reduce high-risk drinking, accurate perception of peer norms was the only outcome variable associated with continued reductions in high-risk drinking (Botvin, et al, 2001);
- In a prevention program for middle school students, participants' estimates of the prevalence of alcohol use predicted their level of use one year later (Marks, Graham & Hansen 1992); and
- In a literature review of effective school-based prevention programs, Hansen (1985) concluded that “after one year alcohol use was significantly reduced among students who received any of the programs that included a normative beliefs component” while “students who did not receive a normative beliefs component... increased their alcohol use as if no intervention had occurred” (p. 59).

Finally,

- Thombs (1999) tested four different models of driving while intoxicated (DWI) or riding with someone who was intoxicated (RWID), and found that misperceptions for DWI and RWID had the greatest predictive value in explaining both DWI and RWID.

In summary, a substantial body of research suggests that misperceptions exist, that misperceptions are associated with increased drinking and negative consequences from drinking, and that drinking behavior is often best predicted by misperceptions of drinking attitudes/or and behaviors. This includes correlational studies, longitudinal studies, and outcome studies with experimental and control groups. Similar findings have been reported for other problem behaviors, such as gambling (Larimer & Neighbors, 2003).